CLAIM LISTING: This listing of claims replaces all prior versions and listings of claims in the instant patent application.

1. (previously presented) A method of detecting Graves' disease in a patient comprising

(a) obtaining an orbital or skin sample comprising fibroblasts from the patient,

(b) contacting said fibroblasts with disease specific IgG from the same patient, and

(c) detecting in said an orbital or skin sample binding of disease specific IgG to the IGF-1 receptor (IGF-1R) relative to a control wherein said binding of disease specific IgG to the IGF-1 receptor (IGF-1R) activates fibroblasts, wherein an increased presence of IgG-activated fibroblasts compared to the control indicates Graves' disease, and wherein fibroblast activation is determined by measuring the level of IL-16 expressed by said IgG-activated fibroblasts, RANTES expressed by said IgG-activated fibroblasts or by measuring T cell migration towards said fibroblasts in said orbital or skin sample.

2. (cancelled)

3. (previously presented) The method of claim 1, wherein an elevated level of the marker compared to the control indicates presence of said IgG-activated fibroblasts.

4.-5. (cancelled)

6. (previously presented) The method of claim 1 wherein the detecting is accomplished by exposing T-cells to said orbital or skin sample comprising said fibroblasts and measuring T-cell migration toward said fibroblasts, wherein an increase in the migration of said fibroblasts relative to the control indicates presence of said IgG-activated fibroblasts.

7. (previously presented) The method of claim 1 wherein the patient is human.

8.-11. (cancelled)